

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011308**Date Inspected:** 23-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Deck Panel**Summary of Items Observed:**

Bridge No. 34-0006 Component: Deck Panels

Summary of Items Observed: On this day Caltrans OSM Quality Assurance (QA) Inspector Gary Richmond was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

On this date QA Inspector Gary Richmond gathered information compiled by the PAUT inspectors, regarding testing and inspections performed on Lift 12 Deck Panels. This information was input into the master folders kept on the Caltrop "Team China" Z drive.

QA inspector performed conventional Ultrasonic (UT) Inspection on Deck Panel tack weld areas. The inspection is preliminary prior to using the Phased Array (PAUT) testing system to verify indications found with conventional Ultrasonic testing. QA inspector performed UT on Deck Panel D3044-001, 5 ribs, 10 welds, 310 total tack welds inspected.

Weld 11 scanned 31 locations with 2 indications.

Weld 12 scanned 31 locations with 2 indications.

Weld 13 scanned 31 locations with 1 indication.

Weld 14 scanned 31 locations with 2 indications.

Weld 15 scanned 31 locations with 0 indications.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Weld 16 scanned 31 locations with 0 indications.
Weld 17 scanned 31 locations with 0 indications.
Weld 18 scanned 31 locations with 1 indication.
Weld 19 scanned 31 locations with 0 indications.
Weld 20 scanned 31 locations with 1 indication.

QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining U-Ribs to Deck Plate. The Deck Panels examined are as follows:

DP-3044-001: 9 welds found non-compliant.
DP-3002-001: 7 welds found compliant and 2 welds found non-compliant.

Tack weld locations found non-compliant are marked on U-Rib and Deck Plate for ZPMC's reference for repair. See Caltrans U-Rib to Deck Panel- Tack Weld Assessment sheets dated 23rd November, 2009 for further information on PAUT inspections.

Summary of Conversations:

No relevant conversations noted.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, who represents the Office of Structural Materials for your project.

| | | |
|----------------------|----------------|-----------------------------|
| Inspected By: | Richmond,Gary | Quality Assurance Inspector |
| Reviewed By: | Carreon,Albert | QA Reviewer |
